

REMARKS

This application has been carefully reviewed in light of the Office Action dated April 3, 2008. Claims 1 to 5, 8, 10, 11, 13 to 17, 19, 21 and 22 are pending in the application, of which Claims 1, 11, 13 and 22 are in independent form. Reconsideration and further examination are respectfully requested.

Claims 12 and 23 are rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter. Without conceding the correctness of the rejection, Claims 12 and 23 have been canceled herein without prejudice or disclaimer of subject matter. Accordingly, Applicant respectfully requests withdrawal of this rejection.

Claims 1 to 5, 8, 10 to 17, 19 and 21 to 23 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being incomplete for omitting essential elements. Without conceding the correctness of the rejection, Applicant submits that the amendments to Claims 1, 11, 13 and 22 clarify how the present invention handles the case when the minimum number of layer/layers of hierarchy corresponds to all the layers of hierarchy of the encoded image data. Accordingly, Applicant requests withdrawal of this rejection.

Claims 1 to 5, 7, 8, 10 to 19 and 21 to 24 were rejected under 35 U.S.C. § 102(b) over “The JPEG2000 Still Image Coding System: An Overview” (Christopholos). Reconsideration and withdrawal of this rejection is respectfully requested.

Turning now to the claims, Claim 1 is directed to a decoding method of decoding encoded image data which has been hierarchically encoded in advance by a discrete wavelet transform method. The method comprises the steps of determining a size

of an image to be outputted, judging a minimum number of layer/layers of hierarchy needed to obtain a decoded image of size equal to or exceed the determined size, determining whether the minimum number of layer/layers of hierarchy corresponds to all the layers of hierarchy of the encoded image data, decoding, if the determination proves true, all the layers of hierarchy of the encoded image data, and otherwise decoding the encoded image data up to a layer of hierarchy which is one or more layers higher than the minimum number of layer/layers of hierarchy, and reducing the size of the decoded image to the determined size.

Amended independent Claim 11 is directed to an apparatus substantially in accordance with the method of Claim 1. Amended Claims 13 and 22 are directed to an encoding method and apparatus, respectively, substantially in accordance with the decoding method of Claim 1.

Applicant respectfully submits that the applied reference, namely Christopholos, is not seen to disclose or to suggest the features of independent Claims 1, 11, 13 and 22. In particular, Christopholos is not seen to disclose or to suggest at least the features of judging a minimum number of layer/layers of hierarchy needed to obtain a decoded image of size equal to or exceed a determined size, determining whether the minimum number of layer/layers of hierarchy corresponds to all the layers of hierarchy of the encoded image data, decoding, if the determination proves true, all the layers of hierarchy of the encoded image data, and otherwise decoding the encoded image data up to a layer of hierarchy which is one or more layers higher than the minimum number of layer/layers of hierarchy.

Therefore, a system using the method of Claim 1 decodes one or more layers higher than the number of layers required to produce a reduced image. Then the image is reduced. By performing this operation, aliasing that results from hierarchical encoding, such as discrete wavelet transform encoding, is reduced.

In contrast, Christopholos is entirely silent about decoding or encoding layers above the minimum required layers in order to reduce aliasing. Furthermore, Christopholos merely discloses the hierarchy structure of the JPEG 2000 standard, and does not disclose nor even suggest the problem of aliasing occurring in an image when decoded to the middle of the image's layer hierarchy. Therefore, as Christopholos is entirely silent about the existence of aliasing, it cannot be fairly said that Christopholos suggests a solution to the aliasing problem, namely encoding or decoding the encoded image data up to a layer of hierarchy which is one or more layers higher than the minimum number of layer/layers of hierarchy.

In light of the deficiencies of Christopholos as discussed above, Applicant submits that amended independent Claims 1, 11, 13 and 22 are now in condition for allowance and respectfully requests same.

The other pending claims in this application are each dependent from the independent claims discussed above and are therefore believed allowable for at least the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of each dependent claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicant's undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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